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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/586,781

07/21/2006

Grant Berent Jacobsen

4702-46

1590

23117

7590

09/16/2010

NIXON & VANDERHYE, PC  
901 NORTH GLEBE ROAD, 11TH FLOOR  
ARLINGTON, VA 22203

EXAMINER

FINK, BRIEANN R

ART UNIT

PAPER NUMBER

1796

MAIL DATE

DELIVERY MODE

09/16/2010

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<p align="center"><b>Advisory Action</b> <b>Before the Filing of an Appeal Brief</b></p>	<p><b>Application No.</b> 10/586,781</p>	<p><b>Applicant(s)</b> JACOBSEN ET AL.</p>	
	<p><b>Examiner</b> Briann R. Fink</p>	<p><b>Art Unit</b> 1796</p>	

**--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

THE REPLY FILED 08 September 2010 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 5 months from the mailing date of the final rejection.  
b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

#### AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because  
(a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);  
(b) ☐ They raise the issue of new matter (see NOTE below);  
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or  
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).  
5. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.  
6. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).  
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.  
The status of the claim(s) is (or will be) as follows:  
Claim(s) allowed: none.  
Claim(s) objected to: none.  
Claim(s) rejected: 12-18 and 20-22.  
Claim(s) withdrawn from consideration: none.

#### AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).  
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).  
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

#### REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:  
See Continuation Sheet.  
12. ☐ Note the attached Information *Disclosure Statement*(s). (PTO/SB/08) Paper No(s). \_\_\_\_\_.  
13. ☐ Other: \_\_\_\_\_.

/Milton I. Cano/  
Supervisory Patent Examiner, Art Unit 1796

Continuation of 11. does NOT place the application in condition for allowance because: the amendment to claim 12 does not overcome the rejections over Murray in view of Jenkins.

Applicant argues that Murray is deficient in the following 4 areas:

1) no teaching of a metallocene complex comprising Ti, Zr, or Hf metals.

The examiner disagrees. Firstly, Murray specifically refers to the catalyst composition as "a bulky ligand metallocene catalyst system of the instant invention" (p. 11, [0129]). Further, Murray teaches a catalyst composition as comprising a catalyst precursor and an activator. The catalyst precursor is that shown by the general formula in [0040]. R' may include metallocene complexes (the top four on the right side of page 4). Murray specifically teaches that "It is most preferred that the metal be a Group 4 metal" (p. 5, [0057]). The Group 4 metals include Ti, Zr, and Hf. Therefore, Murray clearly teaches a "single site polymerization catalyst which is a metallocene complex comprising a metal selected from Ti, Zr, or Hf..." as claimed by all claims of the instant invention.

2) no operation in condensed mode.

As noted by the applicant, Jenkins is used to teach polymerization in condensed mode. Note applicant agrees with the examiner that "The Jenkins references are directed to polymerization in condensed mode." Note applicants specifically cite Jenkins ('399) and ('790) as gas phase processes operating in "condensed mode" (see instant specification, p. 5, [0114]).

Applicants argue that there is no specific direction in Murray to the particular references of Jenkins; however, Murray lists these patents and discloses "...all of which are fully incorporated herein by reference." MPEP 2163.07(b) specifically states the following:

"The information incorporated is as much a part of the application as filed as if the text was repeated in the application, and should be treated as part of the text of the application as filed."

Therefore, it is at least prima facie obvious to one of ordinary skill in the art to carry out the polymerization of Murray in condensed mode.

3) no specific teaching of higher alpha olefins and Murray uses 1-hexene in all examples as the comonomer therefore one of ordinary skill would not have been motivated to use higher alpha olefins.

The examiner disagrees. Murray specifically lists 1-octene and 1-decene as suitable comonomers therefore Murray CLEARLY suggests their use in the polymerization. Although they are not exemplified, the applicants must consider the reference as a whole. Substituting 1-octene or 1-decene for 1-hexene is prima facie obvious.

Also Murray specifically discloses "In the most preferred embodiment of the process of the invention, a copolymer of ethylene is produced, where with ethylene, a comonomer having at least one alpha-olefin having...preferably from 4 to 12 carbon atoms...is polymerized in a gas phase process." (p. 10, [0117]). 4 to 12 carbons overlaps with the claimed range of 7 to 10 carbon atoms. It has been held that overlapping ranges are sufficient to establish prima facie obviousness. See MPEP 2144.05.

4) no specific teaching of partial pressure.

Murray teaches a comonomer to ethylene ratio of 0.001 to 0.200, preferably 0.002 to 0.008. Again, it has been held that overlapping ranges are sufficient to establish prima facie obviousness. See MPEP 2144.05.

Applicants have not shown why the claimed range is unexpectedly better than the broad range taught by Murray.

5) Applicants agree that the level of condensation is controlled by the temperature and partial pressure in the reaction zone, arguing that the skilled person must first have recognized that the level of condensation should be maintained below that at which substantial condensation occurs in order to achieve the instant invention.

One could also argue that the applicants could have determined from the reaction method of Murray carried out in "condensed mode" is actually being carried out below "substantial condensation". The reaction parameters of Murray are all the same as those of the instant invention. Carrying out the reaction of Murray in "condensed mode" inherently results in the claimed condensation limitations. Applicants have not provided any evidence showing that Murray in "condensed mode" is not being carried out below "substantial condensation" or rather the claimed limitations.